

# VETERINARY TECHNOLOGY (VTEC)

The program provides veterinary technology students with a broad understanding of veterinary medicine and the role of animals in society. Students are instructed in the methods and knowledge of veterinary technology such that they become veterinary technicians who are strong advocates for animals, capable of compassionate and accurate animal care; professional in their actions and judgments; and have a desire for lifelong learning and self-improvement.

The primary goal of the veterinary technology program is to provide students with exceptional technical and clinical reasoning skills and knowledge in veterinary technology such that graduates will be prepared to pass the Veterinary Technician National Exam (VTNE) and to be immediate and valuable members of a veterinary medical team. Additionally, the program aims to develop a firm foundation in both farm animal and companion animal veterinary practices. Courses in the program cover basic sciences, veterinary nursing, and veterinary practice management, with a strong focus on hands-on practical knowledge throughout the curriculum. Students gain basic knowledge and skills for the major domestic animal species (dog, cat, horse, and cow). Integration of knowledge in communication, veterinary ethical and legal issues, clinical reasoning skills, and hands-on technical skills allow students to become complete veterinary technicians, capable of providing high-quality, compassionate, and expert care to animals both small and large.

Practical learning experience is provided at the PAWS Veterinary Teaching Clinic, the [UNH Equine Facilities](#), the [Thomas P. Fairchild Dairy Teaching and Research Center](#) and the [UNH Organic Dairy Research Farm](#). The program has a number of animal-related educational partnerships, including those with the [New Hampshire SPCA](#) in Stratham, N.H., and the [Pope Memorial Humane Society of Cochecho Valley](#) in Dover, N.H.

The program is accredited by the [AVMA](#). Students who graduate from an accredited program are eligible to take the [Veterinary Technician National Exam \(VTNE\)](#) and pursue credentialing.

## Admissions Requirements

Applicants to veterinary technology must present four years of college preparatory English, and a minimum of three years of social sciences, college preparatory mathematics, and college preparatory sciences. Two of the three sciences should be college preparatory biology and chemistry with labs. It is recommended that applicants have some experience with animals in a professional setting, and applicants should include a statement in the student application describing their experience. Successful applicants have an overall minimum GPA of 3.0 on a 4.0 scale.

<https://colsa.unh.edu/thompson-school-applied-science/program/aas/veterinary-technology>

## Programs

- [Veterinary Technology \(A.A.S.\)](#)

## Courses

### Veterinary Technology (VTEC)

#### VTEC 424 - Introduction to Veterinary Technology

**Credits:** 2

An overview of the veterinary technology field. Topics in veterinary office practice management are covered, including, appointment scheduling, inventory control, financial transactions, client communication and regulatory, legal, and ethical aspects of veterinary practice. Other topics include veterinary technician and animal science career options, professional development and domestic animal management including breed identification, terminology, and husbandry.

**Grade Mode:** Letter Grading

#### VTEC 430 - Companion Animal Behavior and Handling Techniques

**Credits:** 4

Overview of the development, selection, genetics, and function of specific breeds of companion animals. Canine and feline handling and restraint skills will be demonstrated and practiced. General dog and cat, as well as breed-specific, behavior is included. Other companion animals such as parrots, rabbits, and pigs are reviewed as time allows.

**Equivalent(s):** AAS 430

**Grade Mode:** Letter Grading

#### VTEC 435 - Animal Health and Laboratory Diagnostics

**Credits:** 4

Covers the principles of maintaining animal health by preventing and managing disease via husbandry, immunization, and diagnostic testing. Focus is on domestic species; primarily dogs, cats, horses and cows. Topics include parasitology, microbiology, immunology, and clinical, gross and histopathology. Laboratory activities include fecal flotation, urinalysis, complete blood count and blood chemistry, bacterial culture and sensitivity testing, gram staining, serology, laboratory safety, and principles of sample collection and quality control. VTEC and AAS majors only.

**Attributes:** Biological Science(Discovery); Discovery Lab Course

**Grade Mode:** Letter Grading

**Special Fee:** Yes

#### VTEC 449 - Clinical Animal Nursing Techniques I

**Credits:** 4

Essential skills and knowledge for the care of small animals, focusing on companion animal species. Wellness protocols and basic nursing skills (medication administration, nail trimming, ear cleaning, anal gland expression, wound care, injections, phlebotomy, electrocardiogram, blood pressure measurement) will be discussed and practiced.

**Prerequisite(s):** VTEC 430 with a minimum grade of C+.

**Equivalent(s):** AAS 449

**Grade Mode:** Letter Grading

**Special Fee:** Yes

#### VTEC 497 - Veterinary Technology Work Experience

**Credits:** 0

Provides students supervised introductory hands-on experience in a veterinary medical facility. Students apply skills learned in animal handling and nursing, laboratory methods, client communication and practice management courses. Students are responsible for obtaining a position in an approved veterinary facility and need to complete a minimum of 80 hours of work to fulfill course requirements. Must have rabies vaccine series completed prior to the start of the semester.

**Prerequisite(s):** VTEC 449 with a minimum grade of C+.

**Grade Mode:** Credit/Fail Grading

**VTEC 550 - Clinical Animal Nursing Techniques II**

**Credits:** 4

Builds on materials presented in VTEC 449, Clinical Animal Nursing Techniques I. Covers veterinary imaging modalities including radiographic and ultrasonographic techniques and safety; nursing care of hospitalized patients, emergency medicine, and laboratory animal and exotic companion animal medicine.

**Prerequisite(s):** VTEC 449 with a minimum grade of C+.

**Equivalent(s):** AAS 550

**Grade Mode:** Letter Grading

**Special Fee:** Yes

**VTEC 565 - Pharmacology for Veterinary Technicians**

**Credits:** 4

This course provides study in the area of veterinary medicines emphasizing classes and actions of drugs, calculating dosages, proper administration, and dispensing of drugs. Topics include general pharmacology, calculating dosages, pharmacy regulation guidelines and record keeping. Case-based learning is utilized to correlate common diseases in companion animals with associated pharmacological agents. Specifically, disease pathogenesis, diagnosis, and treatment options are discussed along with pertinent technician interventions and evaluations.

**Prerequisite(s):** AAS 428 with a minimum grade of C+.

**Equivalent(s):** VTEC 265

**Grade Mode:** Letter Grading

**VTEC 575 - Veterinary Anesthesia and Surgical Assisting**

**Credits:** 4

This course provides the theoretical knowledge and practical experience necessary to provide safe and effective anesthesia and analgesia to veterinary patients; including providing nursing care and assistance in all aspects of veterinary surgery and anesthesia.

**Prerequisite(s):** VTEC 565 (may be taken concurrently) with a minimum grade of C+.

**Equivalent(s):** VTEC 275

**Grade Mode:** Letter Grading

**Special Fee:** Yes

**VTEC 579 - Small Animal Practicum I**

**Credits:** 4

This course provides veterinary technology students service learning opportunities. Students manage a wellness clinic for pets, developing staffing/appointment schedules, and performing appropriate procedures on pets. Additionally, students travel off-campus to provide medical, husbandry, and behavioral care for shelter animals. Successful ascertainment and use of correct veterinary terminology is required. A surgical rotation is conducted to introduce techniques in anesthesia, surgical nursing, and dentistry.

**Prerequisite(s):** VTEC 449 with a minimum grade of C+ and VTEC 565 with a minimum grade of C+.

**Grade Mode:** Letter Grading

**Special Fee:** Yes

**VTEC 580 - Small Animal Practicum II**

**Credits:** 4

Students manage a wellness clinic for pets, developing staffing/appointment schedules, and perform appropriate procedures on pets. Additionally, students travel off campus to provide medical care for shelter animals. A surgical rotation is conducted to reinforce techniques in anesthesia/surgical nursing and dentistry. Nursing care assignments are due throughout the semester to aid students in the integration of knowledge gain during their academic coursework. This is a four-credit course offered for VTEC majors only, and by permission only.

**Prerequisite(s):** VTEC 579 with a minimum grade of C+ and VTEC 575 with a minimum grade of C+.

**Grade Mode:** Letter Grading

**Special Fee:** Yes

**VTEC 583 - Large Animal Practicum**

**Credits:** 2

An applied large animal class covering basic veterinary nursing care and procedures, focusing on horses and cows. The majority of class time is spent practicing hands-on skills with animals. Restricted to veterinary technology students only.

**Prerequisite(s):** AAS 421 with a minimum grade of C+ and VTEC 449 with a minimum grade of C+.

**Equivalent(s):** VTEC 283

**Grade Mode:** Letter Grading

**VTEC 595 - Veterinary Technology Internship**

**Credits:** 3

Provides students supervised hands-on experience in a veterinary medical facility within a clinical setting, students apply skills learned in animal handling and nursing, diagnostics and laboratory, client communication and practice management courses. Students are responsible for obtaining a position in an approved veterinary facility prior to the start of the semester. Open to veterinary technology students only.

**Prerequisite(s):** VTEC 550 with a minimum grade of C+ and VTEC 579 with a minimum grade of C+.

**Equivalent(s):** VTEC 295

**Grade Mode:** Credit/Fail Grading

**VTEC 599 - Comprehensive VTNE Review**

**Credits:** 4

Course will prepare veterinary technology students for the Veterinary Technician National Examination (VTNE). Topics include VTNE qualification and registration procedures and standardized test-taking strategies but will primarily focus on a systematic review of the ten knowledge domains covered on the VTNE. Specific course content will vary based on yearly changes to VTNE content and based on students' performance on a VTNE readiness assessment at the start of the course.

**Prerequisite(s):** VTEC 435 with a minimum grade of C+ and VTEC 550 with a minimum grade of C+ and VTEC 575 with a minimum grade of C+ and VTEC 579 with a minimum grade of C+.

**Grade Mode:** Letter Grading

**Special Fee:** Yes

## Faculty

Thompson School of Applied Science Faculty